

CLAIM AMENDMENTS

1. (CURRENTLY AMENDED) A method for electronic tuning of the frequency of the read oscillation to the frequency of the stimulation oscillation in a resetting Coriolis gyro ~~(1')~~, wherein

- the resonator ~~(2)~~ of the Coriolis gyro ~~(1')~~ has a disturbance force applied to it such that

a) the stimulation oscillation remains essentially uninfluenced, and

b) the read oscillation is changed such that a read signal which represents the read oscillation, contains a corresponding disturbance component, wherein

- the disturbance force is defined as that force which is caused by the signal noise in the read signal, and

- the frequency of the read oscillation is controlled such that the magnitude of the disturbance component, which is contained in the read signal, is as small as possible.

2. (ORIGINAL) The method as claimed in claim 1, characterized in that the signal noise is the noise of the tapping electronics.

3. (CURRENTLY AMENDED) The method as claimed in claim 1 ~~or 2~~, characterized in that the disturbance component is determined from a signal which is applied to a quadrature regulator ~~(17)~~ in the quadrature control loop, or is emitted from it.

4. (CURRENTLY AMENDED) The method as claimed in claim 1 ~~or 2~~ characterized in that the disturbance component is determined from a signal which is applied to a rotation rate regulator ~~(21)~~ in the rotation rate control loop, or is emitted from it.

5. (CURRENTLY AMENDED) The method as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the frequency of the read oscillation is controlled by controlling the intensity of an electrical field in which a part of the resonator ~~(2)~~ of the Coriolis gyro ~~(1)~~ oscillates.

6. (CURRENTLY AMENDED) A Coriolis gyro ~~(11)~~, characterized by a device for electronic tuning of the frequency of the read oscillation to the frequency of the stimulation oscillation, having:

- a noise detection unit ~~(26)~~ which determines the noise component of a read signal which represents the read oscillation, and
- a control unit ~~(27)~~, which controls the frequency of the read oscillation such that the magnitude of the noise component, which is contained in the read signal, is as small as possible.

7. (CURRENTLY AMENDED) The Coriolis gyro ~~(11)~~ as claimed in claim 6, characterized in that the noise detection unit ~~(26)~~ determines the noise component from a signal which is applied to a rotation rate regulator ~~(21)~~ in a rotation rate control loop in the Coriolis gyro ~~(11)~~, or is emitted from it.

8. (CURRENTLY AMENDED) The Coriolis gyro ~~(11)~~ as claimed in claim 6, characterized in that the noise detection unit ~~(26)~~ determines the noise component from a signal which is applied to a quadrature regulator ~~(21)~~ in a quadrature control loop in the Coriolis gyro ~~(11)~~, or is emitted from it.